Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

**DATE:** February 2010

#### APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0603611M: Marine Corps Assault Vehicles

BA 4: Advanced Component Development & Prototypes (ACD&P)

| COST (\$ in Millions) | FY 2009<br>Actual | FY 2010<br>Estimate | FY 2011<br>Base<br>Estimate | FY 2011<br>OCO<br>Estimate | FY 2011<br>Total<br>Estimate | FY 2012<br>Estimate | FY 2013<br>Estimate | FY 2014<br>Estimate | FY 2015<br>Estimate | Cost To<br>Complete | Total<br>Cost |
|-----------------------|-------------------|---------------------|-----------------------------|----------------------------|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|
| Total Program Element | 256.042           | 292.217             | 242.765                     | 0.000                      | 242.765                      | 179.041             | 94.026              | 51.428              | 25.660              | Continuing          | Continuing    |
| 0020: <i>AAAV</i>     | 256.042           | 292.217             | 242.765                     | 0.000                      | 242.765                      | 179.041             | 94.026              | 51.428              | 25.660              | Continuing          | Continuing    |

## A. Mission Description and Budget Item Justification

This Program Element (PE) includes funds for the Expeditionary Fighting Vehicle (EFV) Program which will field a successor to the Marine Corps' current amphibious vehicle, the Assault Amphibious Vehicle Model 7A1 (AAV7A1). The EFV will provide the principal means of tactical surface mobility for the Marine Air Group Task Force (MAGTF) during both ship-to-objective maneuvers and sustained combat operations ashore. The EFV will provide the Marine Corps with the capability to execute the full spectrum of military missions from humanitarian operations to conventional combat operations. The EFV replaces the AAV7A1 Vehicle, which was originally fielded in the early 1970s. The EFV is a self-deploying, high-water speed, amphibious, armored, tracked vehicle capable of operating in all weather as well as Nuclear, Biological, and Chemical (NBC) environments.

## **B. Program Change Summary (\$ in Millions)**

|   | FY 2009 | FY 2010 | <b>FY 2011 Base</b> | FY 2011 OCO | FY 2011 Total |
|---|---------|---------|---------------------|-------------|---------------|
| Previous President's Budget                           | 255.264 | 293.466 | 0.000               | 0.000       | 0.000         |
| Current President's Budget                            | 256.042 | 292.217 | 242.765             | 0.000       | 242.765       |
| Total Adjustments                                     | 0.778   | -1.249  | 242.765             | 0.000       | 242.765       |
| <ul> <li>Congressional General Reductions</li> </ul>  |         | -1.218  |                     |             |               |
| <ul> <li>Congressional Directed Reductions</li> </ul> |         | 0.000   |                     |             |               |
| <ul> <li>Congressional Rescissions</li> </ul>         | 0.000   | -0.031  |                     |             |               |
| <ul> <li>Congressional Adds</li> </ul>                |         | 0.000   |                     |             |               |
| <ul> <li>Congressional Directed Transfers</li> </ul>  |         | 0.000   |                     |             |               |
| <ul> <li>Reprogrammings</li> </ul>                    | 0.778   | 0.000   |                     |             |               |
| <ul> <li>SBIR/STTR Transfer</li> </ul>                | 0.000   | 0.000   |                     |             |               |
| <ul> <li>Program Adjustments</li> </ul>               | 0.000   | 0.000   | 242.765             | 0.000       | 242.765       |

# **Change Summary Explanation**

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

**PROJECT** APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy PE 0603611M: Marine Corps Assault Vehicles 0020: *AAAV* 

BA A: Advanced Component Development & Prototypes (ACD&P)

| BA 4. Advanced Component Develo | pincin a i ic     | notypes (Ac         | Dai )                       |                            |                              |                     |                     |                     |                     |                     |               |
|---------------------------------|-------------------|---------------------|-----------------------------|----------------------------|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|
| COST (\$ in Millions)           | FY 2009<br>Actual | FY 2010<br>Estimate | FY 2011<br>Base<br>Estimate | FY 2011<br>OCO<br>Estimate | FY 2011<br>Total<br>Estimate | FY 2012<br>Estimate | FY 2013<br>Estimate | FY 2014<br>Estimate | FY 2015<br>Estimate | Cost To<br>Complete | Total<br>Cost |
| 0020: <i>AAAV</i>               | 256.042           | 292.217             | 242.765                     | 0.000                      | 242.765                      | 179.041             | 94.026              | 51.428              | 25.660              | Continuing          | Continuing    |
| Quantity of RDT&E Articles      | 0                 | 0                   | 0                           | 0                          | 0                            | 0                   | 0                   | 0                   | 0                   |                     |               |

## A. Mission Description and Budget Item Justification

This Program Element (PE) includes funds for the Expeditionary Fighting Vehicle (EFV) Program which will field a successor to the Marine Corps' current amphibious vehicle, the Assault Amphibious Vehicle Model 7A1 (AAV7A1). The EFV will provide the principal means of tactical surface mobility for the Marine Air Group Task Force (MAGTF) during both ship-to-objective maneuvers and sustained combat operations ashore. The EFV will provide the Marine Corps with the capability to execute the full spectrum of military missions from humanitarian operations to conventional combat operations. The EFV replaces the AAV7A1 Vehicle, which was originally fielded in the early 1970s. The EFV is a self-deploying, high-water speed, amphibious, armored, tracked vehicle capable of operating in all weather as well as Nuclear, Biological, and Chemical (NBC) environments.

The EFV program is a ACAT-1D program managed by the Marine Corps. The EFV is the next generation of Marine Corps Assault Vehicles being developed to satisfy the requirements of the 21st Century Marine War Fighters. Along with the Landing Craft Air Cushion (LCAC) and the MV-22 Osprey, the EFV will provide the Marine Corps with the tactical mobility assets required within the Expeditionary Maneuver Warfare capstone. Acquisition of the EFV is critical to the Marine Corps. The total EFV requirement is for 573 weapon systems.

The program received approval to enter the System Development and Demonstration (SDD) Phase of the acquisition process during the Milestone II Defense Acquisition Board Readiness Meeting held on 26 November 2000. All program exit criteria were successfully met or exceeded. The initial SDD Phase (2001) through 2008) included validation of manufacturing and production processes, fabrication and testing of SDD vehicles, and finalizing and implementing the Life Cycle Management for EFV. A follow-on SDD Phase beginning in FY 2008 includes continued design, development, and reliability upgrades; increased RAM testing; modification of existing SDD prototypes; and manufacture and testing of seven additional SDD prototype vehicles.

# B. Accomplishments/Planned Program (\$ in Millions)

|  |         |         | FY 2011 | FY 2011 | FY 2011 |
|--|---------|---------|---------|---------|---------|
|  | FY 2009 | FY 2010 | Base    | oco     | Total   |
| Design development, developmental testing, operational testing, and survivability program. | 211.540 | 239.518 | 178.817 | 0.000   | 178.817 |

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603611M: Marine Corps Assault Vehicles 0020: AAAV

**FY 2009** 

**FY 2010** 

FY 2011

Total

FY 2011

Base

FY 2011

OCO

B. Accomplishments/Planned Program (\$ in Millions)

# FY 2009 Accomplishments: Continued engineering and logistics efforts to support design development, manufacturing planning, and design enhancements of the EFV(P) and EFV(C) designs. Continued the EFV survivability program. Continued developmental and reliability test support, and design, integration and testing of MS-C OA identified modifications. Continued design and development of follow-on reliability enhancements, subsystem design modifications, and modification of existing vehicles integrating

reliability design changes. Procured test spares. Continued design, development and manufacture of new SDD prototypes.

#### FY 2010 Plans:

Continue engineering and logistics efforts to support design development, manufacturing planning, and design enhancements of the EFV(P) and EFV(C) designs. Continue the EFV survivability program. Continue developmental and reliability test support, and design, integration and testing of MS-C OA identified modifications. Continue development of Integrated Electronic Technical Manuals (IETMs). Continue Developmental Testing (DT) and begin Reliability Growth Testing (RGT). Continue design and development of follow-on reliability enhancements, subsystem design modifications, and modification of existing vehicles integrating reliability design changes. Procure test spares. Continue design,

development and manufacture of new SDD prototypes, and begin delivery of prototype vehicles.

#### FY 2011 Base Plans:

Continue engineering and logistics efforts to support design development, manufacturing planning, and design enhancements of the EFV(P) and EFV(C) designs. Continue the EFV survivability program. Continue development of Integrated Electronic Technical Manuals (IETMs). Continue Developmental Testing (DT) and Reliability Growth Testing (RGT). Continue design and development of follow-on reliability enhancements, subsystem design modifications, and modification of existing vehicles integrating reliability design changes. Procure test spares. Support Operational Assessment (OA) of SDD prototypes. Continue system verification (SV) testing and test support, as well as

#### **UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603611M: Marine Corps Assault Vehicles

O020: AAAV

# B. Accomplishments/Planned Program (\$ in Millions)

|   | FY 2009 | FY 2010 | FY 2011<br>Base | FY 2011<br>OCO | FY 2011<br>Total |
|---|---------|---------|-----------------|----------------|------------------|
| design, integration and testing of modifications identified as part of MS-C OA or SV testing. Begin development of Applique Armor.  |         |         |                 |                |                  |
| Perform developmental testing, operational testing, RAM-D testing, Reliability Growth testing.  | 8.012   | 9.420   | 14.994          | 0.000          | 14.99            |
| FY 2009 Accomplishments: Performed developmental/operational testing and RAM-D testing.   |         |         |                 |                |                  |
| FY 2010 Plans: Continue to perform developmental/operational testing and RAM-D testing. Begin Reliability Growth Testing (RGT).   |         |         |                 |                |                  |
| FY 2011 Base Plans: Continue to perform developmental/operational testing and RGT. Perform Operational Assessment (OA).   |         |         |                 |                |                  |
| Provide program support for training development, technical publications and IETMS.   | 1.764   | 9.135   | 16.531          | 0.000          | 16.53            |
| FY 2009 Accomplishments: Provided program support for training systems development and technical publications and IETMS; developed training systems courseware.   |         |         |                 |                |                  |
| FY 2010 Plans: Provide program support for training systems development and technical publications and IETMS; development of training systems courseware.   |         |         |                 |                |                  |
| FY 2011 Base Plans: Provide program support for training systems development and technical publications and IETMS; development of training systems courseware. Increased funding for development of Trainers/ Simulators. |         |         |                 |                |                  |

# **UNCLASSIFIED**

R-1 Line Item #51 Page 4 of 12

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603611M: Marine Corps Assault Vehicles

O020: AAAV

# B. Accomplishments/Planned Program (\$ in Millions)

|  | FY 2009 | FY 2010 | FY 2011<br>Base | FY 2011<br>OCO | FY 2011<br>Total |
|--|---------|---------|-----------------|----------------|------------------|
| Contractor Support   | 16.098  | 14.952  | 17.185          | 0.000          | 17.185           |
| FY 2009 Accomplishments: Provided contractor technical, engineering and management support for program planning, analysis and execution. Provided software design, development and integration support.  |         |         |                 |                |                  |
| FY 2010 Plans: Provide contractor technical, engineering and management support for program planning, analysis and execution. Continue to provide software design, development and integration support.  |         |         |                 |                |                  |
| FY 2011 Base Plans: Provide contractor technical, engineering and management support for program planning, analysis and execution. Continue to provide software design, development and integration support.   |         |         |                 |                |                  |
| n-house Support  | 18.628  | 19.192  | 15.238          | 0.000          | 15.23            |
| FY 2009 Accomplishments: Provided In-house technical engineering and integrated logistics support for program planning, analysis and execution. Procured ammunition in support of the EFV test program. Performed In-house software design, development, and analysis efforts. |         |         |                 |                |                  |
| FY 2010 Plans: Provide In-house technical engineering and integrated logistics support for program planning, analysis and execution. Procure ammunition in support of the EFV test program. Perform In-house software design, development, and analysis efforts.               |         |         |                 |                |                  |
| FY 2011 Base Plans: Provide In-house technical engineering and integrated logistics support for program planning, analysis and execution. Procure ammunition in support of the EFV test program. Perform In-house software design, development, and analysis efforts.          |         |         |                 |                |                  |

# **UNCLASSIFIED**

R-1 Line Item #51 Page 5 of 12

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

**DATE:** February 2010

#### APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0603611M: Marine Corps Assault Vehicles

0020: *AAAV* 

BA 4: Advanced Component Development & Prototypes (ACD&P)

## B. Accomplishments/Planned Program (\$ in Millions)

|  | FY 2009 | FY 2010 | FY 2011<br>Base | FY 2011<br>OCO | FY 2011<br>Total |
|--|---------|---------|-----------------|----------------|------------------|
| Accomplishments/Planned Programs Subtotals | 256.042 | 292.217 | 242.765         | 0.000          | 242.765          |

## C. Other Program Funding Summary (\$ in Millions)

|                               |         |         | FY 2011     | FY 2011    | FY 2011      |         |         |         |         | <b>Cost To</b>  |            |
|-------------------------------|---------|---------|-------------|------------|--------------|---------|---------|---------|---------|-----------------|------------|
| <u>Line Item</u>              | FY 2009 | FY 2010 | <b>Base</b> | <u>000</u> | <u>Total</u> | FY 2012 | FY 2013 | FY 2014 | FY 2015 | <b>Complete</b> | Total Cost |
| • PANMC/147500: <i>EFV</i>    | 0.000   | 0.000   | 0.000       | 0.000      | 0.000        | 7.161   | 6.684   | 8.495   | 10.348  | Continuing      | Continuing |
| PMC/BA2/202200: EFV Regular   | 0.000   | 0.000   | 0.000       | 0.000      | 0.000        | 66.605  | 457.673 | 563.551 | 577.300 | 9,690.537       | 11,550.560 |
| Procurement                   |         |         |             |            |              |         |         |         |         |                 |            |
| • PMC/BA7 700000: Initial EFV | 0.000   | 0.000   | 0.000       | 0.000      | 0.000        | 17.382  | 21.307  | 21.867  | 22.453  | 424.749         | 508.259    |
| Spares                        |         |         |             |            |              |         |         |         |         |                 |            |

## D. Acquisition Strategy

The EFV Program acquisition strategy includes the extensive use of test assets, models, simulation, and advanced technology research to optimize vehicle design, reduce Total Ownership Cost (TOC), and control vehicle unit cost. Three fully functional PDRR prototypes were developed and have undergone extensive developmental testing to further vehicle

maturity. During the initial SDD phase of the program, nine prototype vehicles were manufactured and tested extensively in developmental and operational tests. A tenth vehicle was manufactured for use during Full Up System Level Lethality testing. A follow-on SDD phase contract was awarded in Jul 08 to incorporate major reliability modifications into existing prototypes, and manufacture and test seven new SDD prototypes. Low Rate Initial Production (LRIP) is scheduled to begin in FY13. Initial Operational Capability (IOC) and Full Operational Capability (FOC) will occur in FY16 and FY26, respectively. Cost as an independent variable (CAIV) has been institutionalized throughout the program and as such is an integral consideration in all trade studies and decisions. The program has had a highly integrated and extensive test approach since its inception which has included a very strong engineering-model and prototype testing program supported by extensive modeling and simulation techniques which is intended to continue throughout SDD. The program office management strategy includes planning for life cycle support once the system is fielded to more efficiently manage and optimize operating and support requirements and reduce overall program cost.

The EFV management strategy is event driven, designed to ensure a logical progression through the EFV acquisition to reduce risk, ensure affordability, and provide adequate information to decision makers regarding acquisition progress. The EFV Program team is a partnership of government and industry experts, committed to developing the most versatile

| Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy   |  |            | DATE: February 2010 |
|---|--|------------|---------------------|
| APPROPRIATION/BUDGET ACTIVITY                             | R-1 ITEM NOMENCLATURE                      | PROJECT    |                     |
| 1319: Research, Development, Test & Evaluation, Navy      | PE 0603611M: Marine Corps Assault Vehicles | 0020: AAA\ | /                   |
| BA 4: Advanced Component Development & Prototypes (ACD&P) |  |            |                     |

combat vehicle, providing the optimum balance of combat effectiveness, affordability, innovation, and technology. The program Integrated Product Teams (IPTs), composed of contractors, sub-contractors, Marines, and government civilians, are the foundation of the EFV acquisition management process. The government, prime contractor, and major

subcontractors are co-located in a highly integrated communication environment that facilitates proactive decision-making processes and flexible execution of plans to support these team and products developments.

The program's contracting approach for the EFV is to award the vast majority of the work to one prime contractor, competitively selected in 1996. GDLS operating through its division General Dynamics Amphibious System will be responsible for designing and producing the vehicle and providing support for testing from PDRR through LRIP. Contracts for Government Furnished Property will be kept to a minimum and will include only property which could not otherwise be available to the contractor. Local Area Network support contract is currently provided by an 8(a) firm. Contract support for programmatic and technical support was competitively awarded in December 2008 as a firm fixed price contract and will continue through FY11.

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| Milestone | Reviews |
|-----------|---------|
|           |         |

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

**R-1 ITEM NOMENCLATURE** 

PE 0603611M: Marine Corps Assault Vehicles

**PROJECT** 

0020: *AAAV* 

## **Product Development (\$ in Millions)**

|   |                              |                                      |                           | FY 2    | 2010          | FY 2<br>Ba | -             | FY 2  |               | FY 2011<br>Total |                     |            |                                |
|---|------------------------------|--------------------------------------|---------------------------|---------|---------------|------------|---------------|-------|---------------|------------------|---------------------|------------|--------------------------------|
| Cost Category Item                                  | Contract<br>Method<br>& Type | Performing<br>Activity &<br>Location | Total Prior<br>Years Cost | Cost    | Award<br>Date | Cost       | Award<br>Date | Cost  | Award<br>Date | Cost             | Cost To<br>Complete | Total Cost | Target<br>Value of<br>Contract |
| PDRR Contract                                       | C/CPAF                       | GDLS<br>Woodbridge, VA               | 399.703                   | 0.000   |               | 0.000      |               | 0.000 |               | 0.000            | Continuing          | Continuing | Continuing                     |
| System Design and Development                       | SS/Various                   | GDLS<br>Woodbridge, VA               | 1,678.336                 | 236.390 | Oct 2009      | 163.993    | Oct 2010      | 0.000 |               | 163.993          | 0.000               | 2,078.719  | Continuing                     |
| Other Product<br>Development                        | Various/<br>TBD              | TBD<br>TBD                           | 0.000                     | 2.329   | Mar 2010      | 13.940     | Mar 2011      | 0.000 |               | 13.940           | Continuing          | Continuing | Continuing                     |
| Follow On Product<br>Development                    | Various/<br>TBD              | TBD<br>TBD                           | 0.000                     | 0.000   |               | 0.029      |               | 0.000 |               | 0.029            | Continuing          | Continuing | Continuing                     |
| Regenerative Filtration                             | C/CPAF                       | Army<br>Edgewood Chem/<br>Bio Center | 3.327                     | 0.000   |               | 0.000      |               | 0.000 |               | 0.000            | 0.000               | 3.327      | Continuing                     |
| Survivability Contract                              | Various/<br>Various          | NSMA<br>Arlington, VA                | 28.509                    | 0.799   | Jun 2010      | 0.855      | Jun 2011      | 0.000 |               | 0.855            | Continuing          | Continuing | Continuing                     |
| Display Technology                                  | SS/CPFF                      | ISR Corp<br>Baltimore, MD            | 1.640                     | 0.000   |               | 0.000      |               | 0.000 |               | 0.000            | 0.000               | 1.640      | Continuing                     |
| Intelligent Machining of Advanced Defense Materials | SS/FFP                       | GDLS<br>Woodbridge, VA               | 2.914                     | 0.000   |               | 0.000      |               | 0.000 |               | 0.000            | 0.000               | 2.914      | Continuing                     |
| Digital Facsimile<br>Upgrade                        | SS/FFP                       | GD C4S<br>Taunton, MA                | 2.816                     | 0.000   |               | 0.000      |               | 0.000 |               | 0.000            | 0.000               | 2.816      | Continuing                     |
|   |                              | Subtotal                             | 2,117.245                 | 239.518 |               | 178.817    |               | 0.000 |               | 178.817          |                     |            |                                |

#### **Remarks**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603611M: Marine Corps Assault Vehicles

PROJECT 0020: AAAV

**Support (\$ in Millions)** 

|                                 |                              |                                      | _                         | FY 2   | 2010          | FY 2<br>Ba |               | FY 2  |               | FY 2011<br>Total |                     |            |                                |
|---------------------------------|------------------------------|--------------------------------------|---------------------------|--------|---------------|------------|---------------|-------|---------------|------------------|---------------------|------------|--------------------------------|
| Cost Category Item              | Contract<br>Method<br>& Type | Performing<br>Activity &<br>Location | Total Prior<br>Years Cost | Cost   | Award<br>Date | Cost       | Award<br>Date | Cost  | Award<br>Date | Cost             | Cost To<br>Complete | Total Cost | Target<br>Value of<br>Contract |
| Integrated Logistics<br>Support | Various/<br>Various          | Various<br>Various                   | 20.723                    | 2.114  | Mar 2010      | 4.015      | Mar 2011      | 0.000 |               | 4.015            | Continuing          | Continuing | Continuing                     |
| Training Devices/<br>Simulators | Various/<br>Various          | Various<br>Various                   | 53.489                    | 8.784  | Jan 2010      | 16.081     | Jan 2011      | 0.000 |               | 16.081           | Continuing          | Continuing | Continuing                     |
| Tech Data & Pubs<br>Development | Various/<br>Various          | Various<br>Various                   | 1.171                     | 0.350  | Mar 2010      | 0.450      | Mar 2011      | 0.000 |               | 0.450            | Continuing          | Continuing | Continuing                     |
| Support Equipment Development   | Various/<br>Various          | Various<br>Various                   | 0.431                     | 0.002  | Nov 2009      | 0.000      |               | 0.000 |               | 0.000            | Continuing          | Continuing | Continuing                     |
|                                 |                              | Subtotal                             | 75.814                    | 11.250 |               | 20.546     |               | 0.000 |               | 20.546           |                     |            |                                |

#### Remarks

Test and Evaluation (\$ in Millions)

|  | •                            | ,                                    |                           | FY 2  | 2010          | FY 2   | 2011<br>se    | FY 2  |               | FY 2011<br>Total |                     |            |                                |
|--|------------------------------|--------------------------------------|---------------------------|-------|---------------|--------|---------------|-------|---------------|------------------|---------------------|------------|--------------------------------|
| Cost Category Item   | Contract<br>Method<br>& Type | Performing<br>Activity &<br>Location | Total Prior<br>Years Cost | Cost  | Award<br>Date | Cost   | Award<br>Date | Cost  | Award<br>Date | Cost             | Cost To<br>Complete | Total Cost | Target<br>Value of<br>Contract |
| Developmental,<br>Operational and Live<br>Fire Test & Evaluation | Various/<br>Various          | Various<br>Various                   | 103.622                   | 9.420 | Mar 2010      | 14.994 | Mar 2011      | 0.000 |               | 14.994           | Continuing          | Continuing | Continuing                     |
|  |                              | Subtotal                             | 103.622                   | 9.420 |               | 14.994 |               | 0.000 |               | 14.994           |                     |            |                                |

Remarks

**UNCLASSIFIED** 

R-1 Line Item #51 Page 9 of 12

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

**R-1 ITEM NOMENCLATURE** 

PE 0603611M: Marine Corps Assault Vehicles

**PROJECT** 0020: *AAAV* 

# **Management Services (\$ in Millions)**

|                                       |                              |                                      |                           | FY 2010 |               | FY 2011<br>Base |               | FY 2011<br>OCO |               | FY 2011<br>Total |                     |            |                                |
|---------------------------------------|------------------------------|--------------------------------------|---------------------------|---------|---------------|-----------------|---------------|----------------|---------------|------------------|---------------------|------------|--------------------------------|
| Cost Category Item                    | Contract<br>Method<br>& Type | Performing<br>Activity &<br>Location | Total Prior<br>Years Cost | Cost    | Award<br>Date | Cost            | Award<br>Date | Cost           | Award<br>Date | Cost             | Cost To<br>Complete | Total Cost | Target<br>Value of<br>Contract |
| Engineering and<br>Technical Services | Various/<br>Various          | Various<br>Various                   | 51.138                    | 7.637   | Mar 2010      | 10.222          | Mar 2011      | 0.000          |               | 10.222           | Continuing          | Continuing | Continuing                     |
| Management Support<br>Services        | Various/<br>Various          | Various<br>Various                   | 59.273                    | 6.850   | Dec 2009      | 6.495           | Dec 2010      | 0.000          |               | 6.495            | Continuing          | Continuing | Continuing                     |
| Studies and Analyses                  | Various/<br>Various          | Various<br>Various                   | 0.597                     | 0.465   | Mar 2010      | 0.468           | Mar 2011      | 0.000          |               | 0.468            | Continuing          | Continuing | Continuing                     |
| In-House Technical<br>Support         | Various/<br>Various          | Various<br>Various                   | 134.457                   | 15.370  | Jun 2010      | 9.363           | Jun 2011      | 0.000          |               | 9.363            | Continuing          | Continuing | Continuing                     |
| Program Management<br>Support         | Various/<br>Various          | Various<br>Various                   | 23.392                    | 0.372   | Mar 2010      | 0.325           | Mar 2011      | 0.000          |               | 0.325            | Continuing          | Continuing | Continuing                     |
| Travel                                | Various/<br>Various          | Various<br>Various                   | 6.167                     | 1.335   | Sep 2010      | 1.535           | Sep 2011      | 0.000          |               | 1.535            | Continuing          | Continuing | Continuing                     |
|                                       |                              | Subtotal                             | 275.024                   | 32.029  |               | 28.408          |               | 0.000          |               | 28.408           |                     |            |                                |

#### Remarks

|                     | Total Prior<br>Years Cost | FY 2010 | FY 2<br>Ba | FY 2  | - | FY 2011<br>Total | Cost To<br>Complete | Total Cost | Target<br>Value of<br>Contract |
|---------------------|---------------------------|---------|------------|-------|---|------------------|---------------------|------------|--------------------------------|
| Project Cost Totals | 2,571.705                 | 292.217 | 242.765    | 0.000 |   | 242.765          |                     |            |                                |

#### Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy

**DATE:** February 2010

#### APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

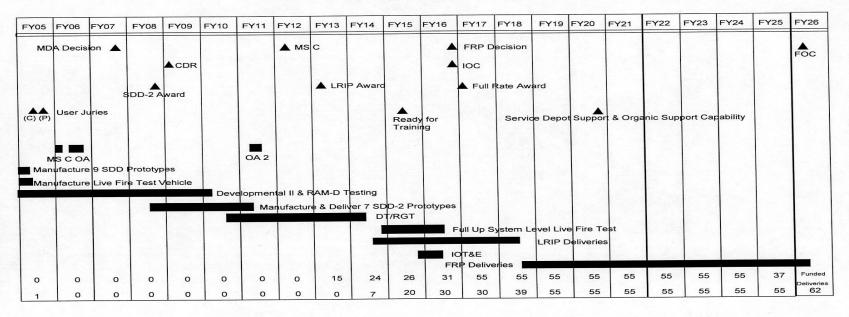
#### R-1 ITEM NOMENCLATURE

PE 0603611M: Marine Corps Assault Vehicles

PROJECT

0020: AAAV

# EFV (AAAV) PROGRAM SCHEDULE



## **UNCLASSIFIED**

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603611M: Marine Corps Assault Vehicles

**PROJECT** 

0020: *AAAV* 

# Schedule Details

|                                     | Start   |      | End     |      |  |
|-------------------------------------|---------|------|---------|------|--|
| Event                               | Quarter | Year | Quarter | Year |  |
| MS C                                | 1       | 2012 | 1       | 2012 |  |
| Operational Assessments             | 2       | 2011 | 3       | 2011 |  |
| Developmental II & RAM-D Testing    | 1       | 2009 | 1       | 2010 |  |
| CDR                                 | 1       | 2009 | 1       | 2009 |  |
| LRIP Contract Award                 | 1       | 2013 | 1       | 2013 |  |
| LRIP Deliveries Lot 1               | 3       | 2014 | 3       | 2015 |  |
| LRIP Deliveries Lot 2               | 3       | 2015 | 4       | 2015 |  |
| IOT&E                               | 4       | 2015 | 4       | 2015 |  |
| Full Up System Level Live Fire Test | 4       | 2014 | 4       | 2015 |  |
| Ready for Training                  | 2       | 2015 | 2       | 2015 |  |